

DYNAMIC POWER CONTROL FOR A TDMA BASED AIR INTERFACE

ABSTRACT OF THE DISCLOSURE

The method provides power control in transmitting a downlink signal of frame data in a wireless network. Each frame is composed of timeslots, with each timeslot being further composed of quarter symbols. The method includes mapping each quarter symbol to an offset within a frame attenuation buffer, and computing a template for the frame, each step being performed only once. The template is used for filling the attenuation buffer with attenuation values to attenuate the transmit power for the downlink signal. Attenuation values are provided for each quarter symbol in a frame, although a computation is not required for each quarter symbol. The attenuation values are grouped in blocks that are recursively copied into the frame attenuation buffer based on the template. The contents of a filled attenuation buffer are output for use in attenuating the transmit power of the frame.

20250-000624